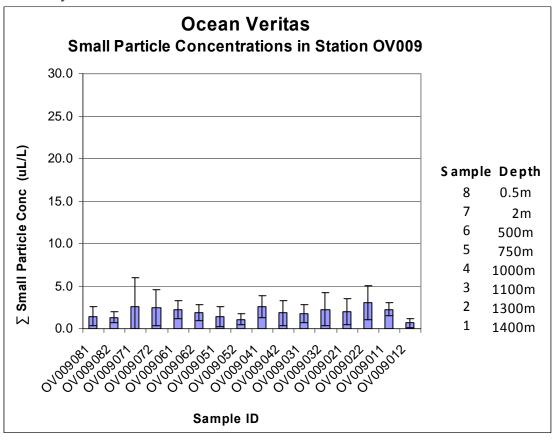
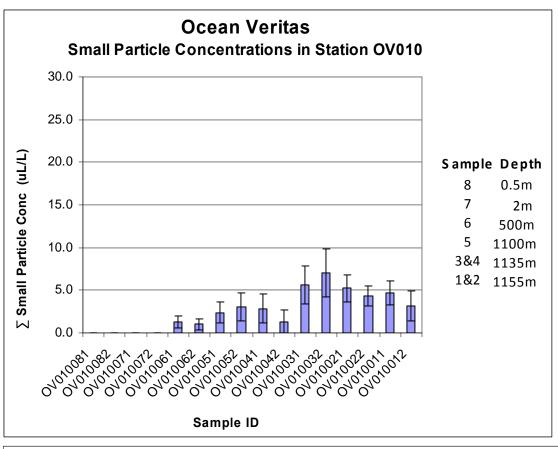
## <u>Daily Report: Tracking the Plume of Dispersed Oil using Particle Size Distribution</u> Measurements

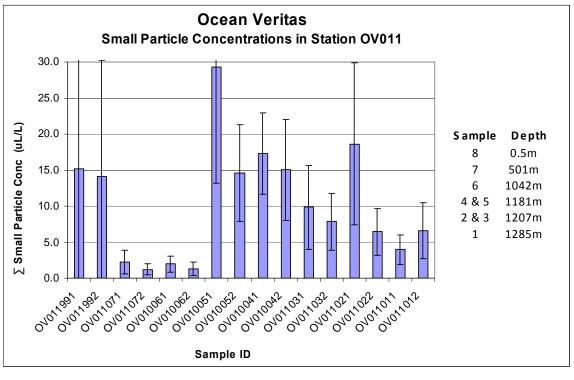
## May 29, 2010

Water samples were collected at four stations for particle size distribution measurements using the LISST-100X particle counter. A total of 62 LISST samples were analyzed, including duplicates. Samples were also collected and stored for shore based fluorescence intensity ratio measurements.

Figure 1. Presents the small droplet ( $\sum 2.5$  - 60µm) particle size data for stations OV009 and OV012. A total of four sites were visited. At site OV010 we found the plume and detected our strongest fluorescence signal at station OV011 (Fig.2). Niskin bottle #7 (2m) did not fire due to a short in the cable when the rosette was ascending. The short in the cable occurred when the rosette was 10m from the surface. The surface sample contained a high volume of oil that overloaded the LISST. Much cleaning was required and blanks were analyzed.







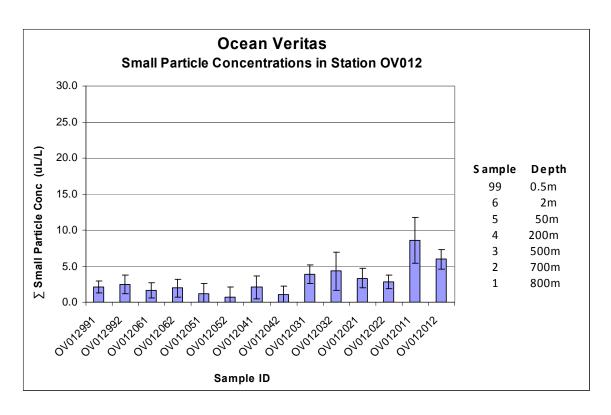


Figure 1: Average small particle concentrations as a function of depth from stations OV009 to OV012.

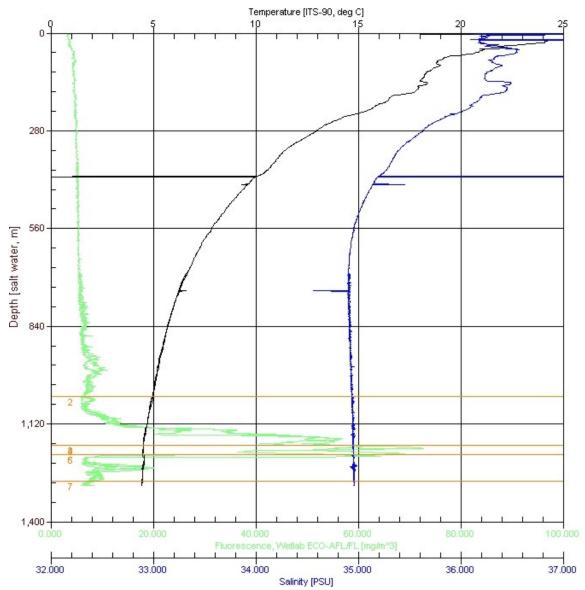


Figure 2: CTD OV011

